ELSEVIER

Journal of Organometallic Chemistry 582 (1999) 383–384

Journal of Organometallic Chemistry

Author Index of Volume 582

Adams, R.D., 9, 358
Al-Juaid, S., 143
Allendoerfer, R.D., 32
Alonso, E., 139
Arnold, J., 108
Astruc, D., 139
Atherton, M.J., 163
Atwood, D.A., 103
Aucott, S.M., 83

Bachman, R.E., 40
Back, S., 126
Bai, Y., 16
Baker, P.K., 259
Banger, K.K., 301
Barnard, T.S., 358
Battle, S.L., 66
Beachley, O.T., Jr., 32
Behrens, U., 58
Berger, S., 153
Bianchi, M., 218
Biesemans, M., 195
Blais, J.-C., 139
Böcskey, Z., 267
Borbulevych, O.Y., 246
Bourret, E.D., 108
Braunstein, P., 371
Brisdon, A.K., 301
Brooksby, P.A., 183
Brosius, K., 358
Bulygina, L.A., 246
Buschmann, R., 58

Campo, J.A., 173
Cano, M., 173
Carmona, E., 3
Chauvin, Y., 371
Chen, T., 25
Chen, X.-N., 252
Chopa, A.B., 229
Collin, J., 211
Contreras, L., 3
Cowley, A.H., 66
Císařová, I., 319

DeCian, A., 371
Decken, A., 66
del Río, I., 126
Demtschuk, J., 70
Denninger, U., 188
Donnadieu, B., 286
Duesler, E.N., 25
Duffy, N.W., 183

Egold, H., 345
E. Herberich, G., 338

Fawcett, J., 163
Ferri, F., 211
Fiedler, J., 153
Fischer, J., 371
Flörke, U., 345
Foos, E.E., 45
Frediani, P., 218

Gabbaï, F.P., 40
G. Alt, H., 328
Ghys, L., 195
Gielen, M., 195
Goddard, R., 188
Gossage, R.A., 126
Greulich, S., 153
Grüner, B., 282
Gun'ko, Y.K., 143
Gupta, B.D., 279

Hadjiliadis, N., 286
Haubrich, S.T., 100
Heras, J.V., 173
Herberhold, M., 352
Herrmann, W.A., 204, 362
Hertel, F., 352
Hitchcock, P.B., 143
Hoa Tran Huy, N., 53
Hockless, D.C.R., 310
Holloway, J.H., 163
Holub, J., 282
Hope, E.G., 163
Huang, X.-Y., 252
Humphrey, M.G., 310

I. Iiskola, E., 273

Jackson, J., 25
Jasper, S.A., 25
Jeffery, J.C., 90
Jelliss, P.A., 90
Jelínek, T., 282
Jones, R.A., 66
Jouet, R.J., 45
Just, O., 119

Kaim, W., 153
Keitsch, M.R., 70
Kemmer, M., 195
Kohl, F.J., 362
Koschmieder, S.U., 66
Krüger, C., 188

Lang, H., 126
Lappert, M.F., 143
Lehmann, C.W., 188
Lesley, M.J.G., 116
Leung, W.-P., 292
Liable-Sands, L.M., 45
Liu, X., 16
Li, X., 119
Lockhart, M.T., 229
Ludvík, J., 319
Lu, K.-L., 160

Mak, T.C.W., 292
Mathey, F., 53
McQuillan, A.J., 183
Meehan, M.M., 259
Milius, W., 352
Mock, U., 116
Molander, G.A., 70
Muñoz-Hernández, M.-Á., 103

Neander, S., 58
Nejezchleba, M., 319
Noble, M.J., 32
Norman, N.C., 116
Nöth, H., 25

Olbrich, F., 58
Orpen, A.G., 116

Paine, R.T., 25
Pakkanen, T.T., 273
Perrin, J.L., 9
Peters, D.W., 108
Philippopoulos, A.I., 286
Piacenti, F., 218
Pickett, N.L., 119
Pietsch, J., 371
Pinilla, E., 173
Pistolesi, L., 218
Pizzano, A., 3
Plešek, J., 282
Podlaha, J., 319
Poilblanc, R., 286
Power, M.P., 108
Power, P.P., 100
P. Spaniol, T., 338
Pu, L., 100

Qanungo, K., 279

Rampf, F.A., 204
Rees, W.S., Jr., 119
Reinhardt, R., 153
Rheingold, A.L., 45
Rheinwald, G., 126
Ricard, L., 53
Rice, C.R., 116
Robinson, B.H., 183
Rosi, L., 218

PII: S0022-328X(99)00197-7

Rossi, R.A., 229
Rosta, E., 267
Rudd, G.E.A., 90
Ruiz-Bermejo, M., 173
Ruiz, J., 139
Russell, D.R., 163
Rutherford, D., 103

Sakanishi, S., 90
Salvini, A., 218
Sánchez, L., 3
Saunders, G.C., 163
Schertl, P., 328
Schneider, J.J., 188
Schraa, M., 345
Schumann, H., 70
Sengar, R.S., 279
Sevvel, R., 160
Shishkin, O.V., 246
Simpson, J., 183
Singh, V., 279
Slawin, A.M.Z., 83
Slough, G.A., 235
Sokolov, V.I., 246
Song, F.-Q., 292
Spiegler, M., 204
Starbuck, J., 116
Štíbr, B., 282
Štěpnička, P., 319
Stone, F.G.A., 90
Sun, C., 235
Szepes, L., 267
Sztáray, B., 267

Teixidor, F., 282
Tiainen, H., 103
Tian, S., 143
Tiekink, E.R.T., 195
Timonen, S., 273
Tio, F.E., 58
Torres, R., 173
Trifonov, A., 211
Tschinkl, M., 40
Tseng, T.-W., 160
Tu, A., 235
Vanderveer, D.G., 119
van Koten, G., 126
Verkade, J.G., 16
Vijai Kanth, V., 279
Viñas, C., 282

Wang, W.-L., 252
Waterman, S.M., 310
Wells, R.L., 45
Weskamp, T., 362
Whitehead, J., 90
Willem, R., 195
Woollins, J.D., 83
Wrackmeyer, B., 352

Xue, F., 292

Yin, Y.-Q., 252

Zhang, J., 252
Zhang, Z.-Y., 292

ELSEVIER

Journal of Organometallic Chemistry 582 (1999) 385–391

Journal of Organometallic Chemistry

Subject Index of Volume 582

Ab initio quantum-chemical methods
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
Acyl complexes
Reactivity studies of η^2-acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
Alkyne
Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
Synthesis and characterisation of linear triphos {$PhP(CH_2CH_2PPh_2)_2$} bridged tri-, tetra- and pentametallic molybdenum(II) (π-allyl)/tungsten(II) (alkyne) complexes, 259
Alkynes
Titanium σ-acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π-conjugated organometallic systems, 126
Allyl
Synthesis and characterisation of linear triphos {$PhP(CH_2CH_2PPh_2)_2$} bridged tri-, tetra- and pentametallic molybdenum(II) (π-allyl)/tungsten(II) (alkyne) complexes, 259
η^3-Allyl rhodium
Comparative chemistry of η^3-oxaallyl and η^3-allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235
Aluminum
Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
Aminoborylphosphanes
Coordination chemistry of aminoborylphosphanes. Crystal structure determinations of $(^iPr_2N)_2BP(H)SiPh_3 \cdot Cr(CO)_5$ and $[(^iPr_2N)_2BP(H)]_2SiMe_2 \cdot W(CO)_4$, 25
Anthracene
Preparation of mercury–anthracene derivatives: π–π-stacking, Hg···Cl and Hg···π interactions in the X-ray crystal structure of polymeric 9-chloromercurioanthracene, 40
Asymmetric catalysis
Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
Azaphosphatrane
Synthesis and structural features of new sterically hindered azaphosphatrane systems: $ZP(RNCH_2CH_2)_3N$, 16
Azaphosphoranes, P–C bond activation
Synthesis of nickel phenyl complexes with new chelating κ^2-*P,N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Azide
Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
Benzyl
Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
Beryllium
The first beryllium diorganoarsenide: synthesis and structure of $(\eta^5\text{-}C_5Me_5)BeAs(t\text{-}Bu)_2$, 66
Biphasic catalysis
Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
1,2-Bis{bis(pentafluorophenyl)phosphino}ethane
Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5-pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-}C_5Me_3[CH_2C_6F_4P(C_6F_5)CH_2]_2\text{-}1,3\}RhBr]^+ \cdot Br^-$, 163
Boron
Some di- and tri-metal complexes derived from the synthon $[Ru(CO)_2(THF)(\eta^5\text{-}7,8\text{-}C_2B_9H_{11})]$, 90
Boron clusters
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-L-*nido*-7,8,9-$C_3B_8H_{10}$ (where L = H_3N, Me_2NH, Me_3N, and Bu^tH_2N), 282
Bridging ligand
Synthesis of nickel phenyl complexes with new chelating κ^2-*P,N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Butadiene
Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
Butenedithiolate
Butenedithiolate triosmium cluster complexes from the reaction of $Os_3(CO)_{10}(NCMe)_2$ with 3,6-dihydro-1,2-dithiin, 9

Cage
Reactions of trialkylgalliums with substituted hydrazines leading to the formation of rings and cages: X-ray structures of $(^iPr_2GaNHNMe_2)_2$ and $(MeGaNHN^tBu)_4$, 108
Carbaborane
Some di- and tri-metal complexes derived from the synthon $[Ru(CO)_2(THF)(\eta^5\text{-}7,8\text{-}C_2B_9H_{11})]$, 90
Carbene complex
From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53
Carbonyl
Mixed-metal cluster chemistry: Part 14: reaction of $[Cp_2W_2Ir_2(CO)_{10}]$ with trimethylphosphite; X-ray crystal structures of $[Cp_2W_2Ir_2(\mu\text{-}CO)_3(CO)_5\{P(OMe)_3\}_2]$ and two modifications of $[CpWIr_3(\mu\text{-}CO)_3(CO)_7\{P(OMe)_3\}]$, 310
Carboranes
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-L-*nido*-7,8,9-$C_3B_8H_{10}$ (where L = H_3N, Me_2NH, Me_3N, and Bu^tH_2N), 282

PII: S0022-328X(99)00198-9

4-Carboxybenzo-18-crown-6
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
4-Carboxybenzo-15-crown-5
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
Carboxylic acids
The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218
Catalysis
Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328
Catalyst
Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[Cp^*Ir(NCMe)_3]^{2+}$ as catalyst, 358
Catalytic activity
The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218
C–C bond formation
Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5-pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-}C_5Me_3[CH_2C_6F_4P(C_6F_5)CH_2]_2\text{-}1,3\}RhBr]^+ \cdot Br^-$, 163
Cerium
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5\text{-}C_5H_4CH(SiMe_3)_2\}_3]$ (Ln = Nd or Tm) and $[Ce\{\eta^5\text{-}C_5H_3(SiMe_2Bu^t)_2\text{-}1,3\}_3]$, 143
C–F bond activation
Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5-pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-}C_5Me_3[CH_2C_6F_4P(C_6F_5)CH_2]_2\text{-}1,3\}RhBr]^+ \cdot Br^-$, 163
C–H bond activation
Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5-pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-}C_5Me_3[CH_2C_6F_4P(C_6F_5)CH_2]_2\text{-}1,3\}RhBr]^+ \cdot Br^-$, 163
Chirality
Synthesis of asymmetric β-hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211
Cleavage
Butenedithiolate triosmium cluster complexes from the reaction of $Os_3(CO)_{10}(NCMe)_2$ with 3,6-dihydro-1,2-dithiin, 9
Cluster
A facile and selective synthesis of hydridotrirhenium cluster under solvothermal conditions, 160
Mixed-metal cluster chemistry: Part 14: reaction of $[Cp_2W_2Ir_2(CO)_{10}]$ with trimethylphosphite; X-ray crystal structures of $[Cp_2W_2Ir_2(\mu\text{-}CO)_3(CO)_5\{P(OMe)_3\}_2]$ and two modifications of $[CpWIr_3(\mu\text{-}CO)_3(CO)_7\{P(OMe)_3\}]$, 310
Monitoring ECE transformations of metal carbonyls by in situ spectroelectrochemistry; SNIFTIRS of $[Co_3(CO)_9C]_2$, 183
Complex
Preparation and organometallic complexes of the new unsymmetrical ligand: $Ph_2PNHC_6H_4PPh_2$, 83
Conformational isomerism
Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[Rh(\mu\text{-}pz^{Fc})(COD)]_2$, 173
Conjugation
Titanium σ-acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π-conjugated organometallic systems, 126
Coordination complexes
Coordination chemistry of aminoborylphosphanes. Crystal structure determinations of $(^iPr_2N)_2BP(H)SiPh_3 \cdot Cr(CO)_5$ and $[(^iPr_2N)_2BP(H)]_2SiMe_2 \cdot W(CO)_4$, 25
18-Crown-6
Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
Crystal engineering
Tribenzylidenemethane complexes of ruthenium. Synthesis and effects of the diastereoisomerism on the crystal packing, 338
Crystal structure
Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(CO)_8LCo_2M(\mu_3\text{-}C)C(O)OCH_2(\mu\text{-}CCH)Co_2(CO)_6$ [M = Co, W; L = CO, η^5-C_5H_5], 252
Synthesis and structural characterization of $(THF)_3Na\{(SnC_6H_3\text{-}2,6\text{-}Trip_2)_2\}$ (Trip = C_6H_2-2,4,6-*i*-Pr_3): effects of cation–anion association on Sn–Sn multiple bonding, 100
Synthesis of nickel phenyl complexes with new chelating κ^2-*P*,*N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Cyclic voltammetry
Titanium σ-acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π-conjugated organometallic systems, 126
Cyclopalladation
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
Cyclopenadienyls
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5\text{-}C_5H_4CH(SiMe_3)_2\}_3]$ (Ln = Nd or Tm) and $[Ce\{\eta^5\text{-}C_5H_3(SiMe_2Bu^t)_2\text{-}1,3\}_3]$, 143
Cyclopentadiene
Synthesis of asymmetric β-hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211
Cyclopentadienyl
Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
Cyclopentadienyl ligand
Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $[\{\eta^5\text{:}\eta^1\text{-}C_5H_4(CH_2)_2NMe_2\}Rh^{III}Cl_2]$ complex, 286
Cyclopropyl carbinyl rearrangement
Comparative chemistry of η^3-oxaallyl and η^3-allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235
Desilylenation
Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylenation, 139
Diastereoisomers
Tribenzylidenemethane complexes of ruthenium. Synthesis and effects of the diastereoisomerism on the crystal packing, 338
Diborane(4)
Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116
Di-*n*-butylin derivative
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
Diorganoarsenide
The first beryllium diorganoarsenide: synthesis and structure of $(\eta^5\text{-}C_5Me_5)BeAs(t\text{-}Bu)_2$, 66

Dioxolane
Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[Cp^*Ir(NCMe)_3]^{2+}$ as catalyst, 358
1,6-Diphosphabicyclo[4,n,0] compounds
From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53
Diphosphines
Reactivity studies of η^2-acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
Dynamical activity
Butenedithiolate triosmium cluster complexes from the reaction of $Os_3(CO)_{10}(NCMe)_2$ with 3,6-dihydro-1,2-dithiin, 9

Electrochemistry
Electronic coupling of two $[Cp^*ClM]^+/[Cp^*M]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1′-(diphenylphosphino)ferrocenecarboxylic acid, 319
Enolates
Reactivity studies of η^2-acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
Epoxide
Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[Cp^*Ir(NCMe)_3]^{2+}$ as catalyst, 358
EPR
Electronic coupling of two $[Cp^*ClM]^+/[Cp^*M]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
EPR spectra
Synthesis of an organogallium(I) compound $[Ga(CH_2CMe_2Ph)]_n$ with EPR spectral evidence for gallium clusters, 32
Estrone
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
Ethylene
Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
Ethylene insertion
Synthesis of nickel phenyl complexes with new chelating κ^2-*P*,*N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Ethylene polymerization
Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328
EXAFS
The first early transition metal perfluorovinyl complexes: the synthesis of $Cp_2M(CF{=}CF_2)_nX_{2-n}$ (Cp: η^5-$C_5H_5^-$; M = Ti, Zr; X = Cl or F) and structures of $Cp_2Ti(CF{=}CF_2)_nX_{2-n}$ (X = Cl, F) via Ti K-edge EXAFS studies, 301

Ferrocene
1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1′-(diphenylphosphino)ferrocenecarboxylic acid, 319
[1]Ferrocenophane
1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
Ferrocenophane
Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116
Ferrocenylpyrazole
Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[Rh(\mu\text{-}pz^{Fc})(COD)]_2$, 173
Ferrocenylsilane
Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylenation, 139
Fluorenyl
Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328
Functionalized
Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $[\{\eta^5{:}\eta^1\text{-}C_5H_4(CH_2)_2NMe_2\}Rh^{III}Cl_2]$ complex, 286
Functionalized phosphines
The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218

Gallium
Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl] gallium, $Aryl_2GaSi(SiMe_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $Ph_2GaSi(SiMe_3)_3 \cdot THF$, 119
Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
Gallium antimonide
Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[Et_2GaAs(SiMe_3)_2]_2$, $[Et_2GaSb(SiMe_3)_2]_2$ and $Et_2{<}ovl\ type = \text{“bar“}{>}GaAs(SiMe_3)_2Ga(Et)_2Sb(SiMe_3)_2$, 45
Gallium arsenide
Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[Et_2GaAs(SiMe_3)_2]_2$, $[Et_2GaSb(SiMe_3)_2]_2$ and $Et_2{<}ovl\ type = \text{“bar“}{>}GaAs(SiMe_3)_2Ga(Et)_2Sb(SiMe_3)_2$, 45
Gallium arsenide antimonide
Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[Et_2GaAs(SiMe_3)_2]_2$, $[Et_2GaSb(SiMe_3)_2]_2$ and $Et_2{<}ovl\ type = \text{“bar“}{>}GaAs(SiMe_3)_2Ga(Et)_2Sb(SiMe_3)_2$, 45
Gallium clusters
Synthesis of an organogallium(I) compound $[Ga(CH_2CMe_2Ph)]_n$ with EPR spectral evidence for gallium clusters, 32
Gallium radicals
Synthesis of an organogallium(I) compound $[Ga(CH_2CMe_2Ph)]_n$ with EPR spectral evidence for gallium clusters, 32

He(I)/He(II) photoelectron spectroscopy
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
Heterocycle
Preparation and organometallic complexes of the new unsymmetrical ligand: $Ph_2PNHC_6H_4PPh_2$, 83
HME
Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
Homogeneous catalysis
N-heterocyclic carbenes: novel ruthenium–alkylidene complexes, 362
Homolytic displacements
Homolytic displacements at two reactive centers: organodicobaloximes and organodisulfonyl chloride, 279

Hybrid phosphines
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1′-(diphenylphosphino)ferrocenecarboxylic acid, 319
Hydrazine
Reactions of trialkylgalliums with substituted hydrazines leading to the formation of rings and cages: X-ray structures of $(^{i}Pr_2GaNHNMe_2)_2$ and $(MeGaNHN^{t}Bu)_4$, 108
Hydroformylation
Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
Hydrogenation
The role of functionalized phosphines in the hydrogenation of carboxylic acids in the presence of phosphine substituted hydrido ruthenium complexes, 218
Hydrosilylation
Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylenation, 139
Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ln(\mu\text{-}Me)]_2$ and $[(\eta^5\text{-}C_5H_4SiMe_2^{t}Bu)_2Ln(\mu\text{-}Me)]_2$, 70
Imidazole
Synthesis of nickel phenyl complexes with new chelating κ^2-*P*,*N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Indenyl
Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
π-Interactions
Preparation of mercury–anthracene derivatives: π–π-stacking, Hg···Cl and Hg···π interactions in the X-ray crystal structure of polymeric 9-chloromercurioanthracene, 40
Intramolecular coordination
Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl] gallium, $Aryl_2GaSi(SiMe_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $Ph_2GaSi(SiMe_3)_3 \cdot THF$, 119
Iridium
Electronic coupling of two $[Cp^*ClM]^+/[Cp^*M]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
Mixed-metal cluster chemistry: Part 14: reaction of $[Cp_2W_2Ir_2(CO)_{10}]$ with trimethylphosphite; X-ray crystal structures of $[Cp_2W_2Ir_2(\mu\text{-}CO)_3(CO)_5\{P(OMe)_3\}_2]$ and two modifications of $[CpWIr_3(\mu\text{-}CO)_3(CO)_7\{P(OMe)_3\}]$, 310
Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[Cp^*Ir(NCMe)_3]^{2+}$ as catalyst, 358
Iron
Some di- and tri-metal complexes derived from the synthon $[Ru(CO)_2(THF)(\eta^5\text{-}7,8\text{-}C_2B_9H_{11})]$, 90

Ketone
Synthesis of 1,3-dioxolanes by the addition of ketones to epoxides by using $[Cp^*Ir(NCMe)_3]^{2+}$ as catalyst, 358
Kinetics of hydrosilylation
Comparative chemistry of η^3-oxaallyl and η^3-allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235

Lanthanide
Synthesis and X-ray structures of trivalent lanthanide (+)-neomenthylcyclopentadienyl complexes, 292
Lanthanides
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5\text{-}C_5H_4CH(SiMe_3)_2\}_3]$ (Ln = Nd or Tm) and $[Ce\{\eta^5\text{-}C_5H_3(SiMe_2Bu^{t})_2\text{-}1,3\}_3]$, 143
Lanthanum
Synthesis of asymmetric β-hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211
Ligand
Synthesis of asymmetric β-hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211
Linked clusters
Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(CO)_8LCo_2M(\mu_3\text{-}C)C(O)OCH_2(\mu\text{-}CCH)Co_2(CO)_6$ [M = Co, W; L = CO, $\eta^5\text{-}C_5H_5$], 252

Mercury
Preparation of mercury–anthracene derivatives: π–π-stacking, Hg···Cl and Hg···π interactions in the X-ray crystal structure of polymeric 9-chloromercurioanthracene, 40
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1′-(diphenylphosphino)ferrocenecarboxylic acid, 319
Metal amide
Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
Metal carbonyls
Coordination chemistry of aminoborylphosphanes. Crystal structure determinations of $(^{i}Pr_2N)_2BP(H)SiPh_3 \cdot Cr(CO)_5$ and $[(^{i}Pr_2N)_2BP(H)]_2SiMe_2 \cdot W(CO)_4$, 25
Monitoring ECE transformations of metal carbonyls by in situ spectroelectrochemistry; SNIFTIRS of $[Co_3(CO)_9C]_2$, 183
Metal exchange
Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(CO)_8LCo_2M(\mu_3\text{-}C)C(O)OCH_2(\mu\text{-}CCH)Co_2(CO)_6$ [M = Co, W; L = CO, $\eta^5\text{-}C_5H_5$], 252
Metallocenes
Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ln(\mu\text{-}Me)]_2$ and $[(\eta^5\text{-}C_5H_4SiMe_2^{t}Bu)_2Ln(\mu\text{-}Me)]_2$, 70
Titanium σ-acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π-conjugated organometallic systems, 126
Metallostars
Hydrosilylation of an hexa-olefin star with organometallic hydrogenosilanes: ferrocenylsilylation and desilylenation, 139
Metal–metal interaction
Titanium σ-acetylides as building blocks for heterobimetallic transition metal complexes: synthesis and redox behaviour of π-conjugated organometallic systems, 126
Meta metallation
Meta and *para* metallation of EPh_4^+ (E = P, As) and $N(PPh_3)_2^+$ by the dinuclear acylanion $[Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7ax\text{-}(C(Ph)O)]^-$. Formation of zwitterionic cluster complexes $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4EPh_3)$ (E = P, As; $x = m$, p) and $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4PPh_2NPPh_3)$, 345
Metathetical reactions
Synthesis and X-ray structures of trivalent lanthanide (+)-neomenthylcyclopentadienyl complexes, 292
Molybdenum
Reactivity studies of η^2-acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3

Synthesis and characterisation of linear triphos {$PhP(CH_2CH_2PPh_2)_2$} bridged tri-, tetra- and pentametallic molybdenum(II) (π-allyl)/tungsten(II) (alkyne) complexes, 259
Mössbauer spectroscopy
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1′-(diphenylphosphino)ferrocenecarboxylic acid, 319
Multiple bonding
Synthesis and structural characterization of $(THF)_3Na\{(SnC_6H_3$–2,6-$Trip_2)_2\}$ (Trip = C_6H_2-2,4,6-i-Pr_3): effects of cation–anion association on Sn–Sn multiple bonding, 100

Nanocrystalline
Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[Et_2GaAs(SiMe_3)_2]_2$, $[Et_2GaSb(SiMe_3)_2]_2$ and Et_2<ovl type = "bar">$GaAs(SiMe_3)_2Ga(Et)_2Sb(SiMe_3)_2$, 45
Neodymium
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5\text{-}C_5H_4CH(SiMe_3)_2\}_3]$ (Ln = Nd or Tm) and $[Ce\{\eta^5\text{-}C_5H_3(SiMe_2Bu^t)_2\text{-}1,3\}_3]$, 143
Neomenthylcyclopentadienyl
Synthesis and X-ray structures of trivalent lanthanide (+)-neomenthylcyclopentadienyl complexes, 292
N-heterocyclic carbenes
N-heterocyclic carbenes: novel ruthenium–alkylidene complexes, 362
Nickel
Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
Nitride
Examination of dibenzyl aluminum and gallium azides as potential precursors to AlN and GaN, 103
NMR
1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352

Olefin metathesis
N-heterocyclic carbenes: novel ruthenium–alkylidene complexes, 362
Organodicobaloximes
Homolytic displacements at two reactive centers: organodicobaloximes and organodisulfonyl chloride, 279
Organodisulfonyl chloride
Homolytic displacements at two reactive centers: organodicobaloximes and organodisulfonyl chloride, 279
Organogallium compounds
Synthesis of an organogallium(I) compound $[Ga(CH_2CMe_2Ph)]_n$ with EPR spectral evidence for gallium clusters, 32
Organolanthanide compounds
Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ln(\mu\text{-}Me)]_2$ and $[(\eta^5\text{-}C_5H_4SiMe_2{}^tBu)_2Ln(\mu\text{-}Me)]_2$, 70
Organolutetium compounds
Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ln(\mu\text{-}Me)]_2$ and $[(\eta^5\text{-}C_5H_4SiMe_2{}^tBu)_2Ln(\mu\text{-}Me)]_2$, 70
Organometallic complexes
Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $[\{\eta^5{:}\eta^1\text{-}C_5H_4(CH_2)_2NMe_2\}Rh^{III}Cl_2]$ complex, 286
Organosamarium compounds
Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ln(\mu\text{-}Me)]_2$ and $[(\eta^5\text{-}C_5H_4SiMe_2{}^tBu)_2Ln(\mu\text{-}Me)]_2$, 70
Organoyttrium compounds
Organometallic compounds of the lanthanides: Part CIXXX. Synthesis, structure and hydrolysis of 'moderately stable' hydrosilylation catalysts $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ln(\mu\text{-}Me)]_2$ and $[(\eta^5\text{-}C_5H_4SiMe_2{}^tBu)_2Ln(\mu\text{-}Me)]_2$, 70
η^3-Oxaallyl rhodium
Comparative chemistry of η^3-oxaallyl and η^3-allyl rhodium(I) complexes in the hydrosilylation of cyclopropyl ketones: observation of an unprecedented rearrangement, 235

Para metallation
Meta and *para* metallation of EPh_4^+ (E = P, As) and $N(PPh_3)_2^+$ by the dinuclear acylanion $[Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7ax\text{-}(C(Ph)O)]^-$. Formation of zwitterionic cluster complexes $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4EPh_3)$ (E = P, As; $x = m$, p) and $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4PPh_2NPPh_3)$, 345
Pentamethylcyclopentadienyl
Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
The first beryllium diorganoarsenide: synthesis and structure of $(\eta^5\text{-}C_5Me_5)BeAs(t\text{-}Bu)_2$, 66
Perfluorovinyl
The first early transition metal perfluorovinyl complexes: the synthesis of $Cp_2M(CF{=}CF_2)_nX_{2-n}$ (Cp: η^5-$C_5H_5^-$; M = Ti, Zr; X = Cl or F) and structures of $Cp_2Ti(CF{=}CF_2)_nX_{2-n}$ (X = Cl, F) via Ti K-edge EXAFS studies, 301
Phenols
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
Phosphine
Preparation and organometallic complexes of the new unsymmetrical ligand: $Ph_2PNHC_6H_4PPh_2$, 83
Synthese, Struktur und Reaktivität zweikerniger Pentamethyl-Cyclopentadien-Nickelkomplexe mit verbrückenden Butadienliganden, 188
Phosphinidene
From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53
Phosphite
Mixed-metal cluster chemistry: Part 14: reaction of $[Cp_2W_2Ir_2(CO)_{10}]$ with trimethylphosphite; X-ray crystal structures of $[Cp_2W_2Ir_2(\mu\text{-}CO)_3(CO)_5\{P(OMe)_3\}_2]$ and two modifications of $[CpWIr_3(\mu\text{-}CO)_3(CO)_7\{P(OMe)_3\}]$, 310
Phosphites
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
Phosphorus
1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
Phosphorus ylides
Synthesis of nickel phenyl complexes with new chelating κ^2-*P*,*N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Photostimulation
Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
Ph_3Sn^- ions
Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
P-insertion
From a terminal (*cis*-2-butene-1,4-diyl-1,4-diphosphinidene) complex to some new diphosphorus bicycles, 53

(*P*,*N*)-chelates
Synthesis of nickel phenyl complexes with new chelating κ^2-*P*,*N* ligands derived from α-iminoazatriphenylphosphoranes, 371
Polymerization
Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
Potassium
Cyclopentadienyl, indenyl, fluorenyl, and pentamethylcyclopentadienyl complexes of potassium with 18-crown-6, 58
Precursors
Preparation of single-source precursors to nanocrystalline gallium arsenide and gallium antimonide. X-ray crystal structures of $[Et_2GaAs(SiMe_3)_2]_2$, $[Et_2GaSb(SiMe_3)_2]_2$ and Et_2<ovl type = "bar">$GaAs(SiMe_3)_2Ga(Et)_2Sb(SiMe_3)_2$, 45
Reactivity
Reactivity studies of η^2-acyl complexes of molybdenum: reactions with strong bases and with bidentate phosphines, 3
Rhenium carbonyl
A facile and selective synthesis of hydridotrirhenium cluster under solvothermal conditions, 160
Rhenium carbonyl complex
Meta and *para* metallation of EPh_4^+ (E = P, As) and $N(PPh_3)_2^+$ by the dinuclear acylanion $[Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7ax\text{-}(C(Ph)O)]^-$. Formation of zwitterionic cluster complexes $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4EPh_3)$ (E = P, As; $x = m$, p) and $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4PPh_2NPPh_3)$, 345
Rhodium
Electronic coupling of two $[Cp^*ClM]^+/[Cp^*M]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
Intermediates and anion effects in the activation of carbon–fluorine bonds by η^5-pentamethylcyclopentadienylrhodium halide complexes; crystal structure of $[\{\eta^5\text{-}C_5Me_3[CH_2C_6F_4P(C_6F_5)CH_2]_2\text{-}1,3\}RhBr]^+ \cdot Br^-$, 163
Some di- and tri-metal complexes derived from the synthon $[Ru(CO)_2(THF)(\eta^5\text{-}7,8\text{-}C_2B_9H_{11})]$, 90
Water-soluble metal complexes and catalysts: X. BIPHLOPHOS, a novel axially chiral diphosphine ligand: preparation and application in the asymmetric rhodium-catalyzed hydroformylation of styrene, 204
Rhodium complexes
Organometallic Rh(III) complexes with the bifunctional ligand [2-(dimethylamino)ethyl]cyclopentadiene. Crystal structure of the $[\{\eta^5\text{:}\eta^1\text{-}C_5H_4(CH_2)_2NMe_2\}Rh^{III}Cl_2]$ complex, 286
Rhodium–pyrazolate dimers
Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[Rh(\mu\text{-}pz^{Fc})(COD)]_2$, 173
Ruthenium
N-heterocyclic carbenes: novel ruthenium–alkylidene complexes, 362
Some di- and tri-metal complexes derived from the synthon $[Ru(CO)_2(THF)(\eta^5\text{-}7,8\text{-}C_2B_9H_{11})]$, 90
Samarium
Synthesis of asymmetric β-hydroxy-cyclopentadienyl ligands and of their bidentate lanthanide complexes, 211
Silica
Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
Silicon
Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)-phenyl]-[tris(trimethylsilyl)silyl]gallium, $Aryl_2GaSi(SiMe_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $Ph_2GaSi(SiMe_3)_3 \cdot THF$, 119
Solvothermal method
A facile and selective synthesis of hydridotrirhenium cluster under solvothermal conditions, 160
Spectroelectrochemistry
Electronic coupling of two $[Cp^*ClM]^+/[Cp^*M]$ reaction centers via π conjugated bridging ligands: similarities and differences between rhodium and iridium analogues, 153
Monitoring ECE transformations of metal carbonyls by in situ spectroelectrochemistry; SNIFTIRS of $[Co_3(CO)_9C]_2$, 183
$S_{RN}1$ Reactions
Reactions of haloarenes, haloheteroarenes and dihalobenzenes with triphenylstannyl anions in DMSO and acetonitrile, 229
Steric hindrance
Synthesis and structural features of new sterically hindered azaphosphatrane systems: $ZP(RNCH_2CH_2)_3N$, 16
Structure
Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116
Syntheses
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-L-*nido*-7,8,9-$C_3B_8H_{10}$ (where L = H_3N, Me_2NH, Me_3N, and Bu^tH_2N), 282
Synthesis
Synthesis and characterization of novel organometallic compounds containing linked clusters. The molecular structure of $(CO)_8LCo_2M(\mu_3\text{-}C)C(O)OCH_2(\mu\text{-}CCH)Co_2(CO)_6$ [M = Co, W; L = CO, $\eta^5\text{-}C_5H_5$], 252
Synthesis and X-ray structure of a [4]ferrocenophane containing a boron–boron bond, 116
The first early transition metal perfluorovinyl complexes: the synthesis of $Cp_2M(CF{=}CF_2)_nX_{2-n}$ (Cp: $\eta^5\text{-}C_5H_5^-$; M = Ti, Zr; X = Cl or F) and structures of $Cp_2Ti(CF{=}CF_2)_nX_{2-n}$ (X = Cl, F) via Ti K-edge EXAFS studies, 301
Tetrahydridoborato ligand
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
Thulium
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5\text{-}C_5H_4CH(SiMe_3)_2\}_3]$ (Ln = Nd or Tm) and $[Ce\{\eta^5\text{-}C_5H_3(SiMe_2Bu^t)_2\text{-}1,3\}_3]$, 143
Tin
Synthesis and structural characterization of $(THF)_3Na\{(SnC_6H_3\text{-}2,6\text{-}Trip_2)_2\}$ (Trip = C_6H_2-2,4,6-*i*-Pr_3): effects of cation–anion association on Sn–Sn multiple bonding, 100
Titanium
The first early transition metal perfluorovinyl complexes: the synthesis of $Cp_2M(CF{=}CF_2)_nX_{2-n}$ (Cp: $\eta^5\text{-}C_5H_5^-$; M = Ti, Zr; X = Cl or F) and structures of $Cp_2Ti(CF{=}CF_2)_nX_{2-n}$ (X = Cl, F) via Ti K-edge EXAFS studies, 301
Transannulation
Synthesis and structural features of new sterically hindered azaphosphatrane systems: $ZP(RNCH_2CH_2)_3N$, 16
Transition metal
Preparation and organometallic complexes of the new unsymmetrical ligand: $Ph_2PNHC_6H_4PPh_2$, 83
Trialkylgallium
Reactions of trialkylgalliums with substituted hydrazines leading to the formation of rings and cages: X-ray structures of $(^iPr_2GaNHNMe_2)_2$ and $(MeGaNHN^tBu)_4$, 108

Tribenzylidenemethane
Tribenzylidenemethane complexes of ruthenium. Synthesis and effects of the diastereoisomerism on the crystal packing, 338
Tricarbaboranes
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-L-*nido*-7,8,9-$C_3B_8H_{10}$ (where L = H_3N, Me_2NH, Me_3N, and Bu^tH_2N), 282
Tricarbollides
A simple route to essential tricarbollides. A high-yield synthesis of 7-amine-*nido*-7,8,9-tricarbaundecaboranes(10), 7-L-*nido*-7,8,9-$C_3B_8H_{10}$ (where L = H_3N, Me_2NH, Me_3N, and Bu^tH_2N), 282
Tri-*n*-butylin derivative
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
Triosmium clusters
Butenedithiolate triosmium cluster complexes from the reaction of $Os_3(CO)_{10}(NCMe)_2$ with 3,6-dihydro-1,2-dithiin, 9
Triphenyltin derivative
Synthesis and characterization of triphenyl-, tri-*n*-butyl and di-*n*-butyltin derivatives of 4-carboxybenzo-18-crown-6 and -15-crown-5, 195
Triphos
Synthesis and characterisation of linear triphos {$PhP(CH_2CH_2PPh_2)_2$} bridged tri-, tetra- and pentametallic molybdenum(II) (π-allyl)/tungsten(II) (alkyne) complexes, 259
Tungsten
Mixed-metal cluster chemistry: Part 14: reaction of $[Cp_2W_2Ir_2(CO)_{10}]$ with trimethylphosphite; X-ray crystal structures of $[Cp_2W_2Ir_2(\mu\text{-}CO)_3(CO)_5\{P(OMe)_3\}_2]$ and two modifications of $[CpWIr_3(\mu\text{-}CO)_3(CO)_7\{P(OMe)_3\}]$, 310
Tyrosine
Cyclopalladation of phenols in the form of mixed phosphite esters, 246

X-Ray analysis
1-Dialkylamino-1-phospha-[1]ferrocenophanes—synthesis and characterisation, 352
X-ray diffraction
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
X-ray molecular structure
Cyclopalladation of phenols in the form of mixed phosphite esters, 246
X-rays
Organolanthanide chemistry with bis(trimethylsilyl)methyl- and *tert*-butyldimethylsilyl-substituted cyclopentadienyl ligands. Synthesis and characterisation of tris(cyclopentadienyl)lanthanide(III) complexes, including crystal structures of $[Ln\{\eta^5\text{-}C_5H_4CH(SiMe_3)_2\}_3]$ (Ln = Nd or Tm) and $[Ce\{\eta^5\text{-}C_5H_3(SiMe_2Bu^t)_2\text{-}1,3\}_3]$, 143
X-ray structure
Compounds containing gallium–silicon bonding: syntheses and X-ray crystal structures of bis-[2(dimethylaminomethyl)phenyl]-[tris(trimethylsilyl)silyl] gallium, $Aryl_2GaSi(SiMe_3)_3$ and diphenyl-[tris(trimethylsilyl)silyl]gallium, $Ph_2GaSi(SiMe_3)_3 \cdot THF$, 119
Ferrocenylpyrazolyl bridging rhodium dimers. Crystal structure of $[Rh(\mu\text{-}pz^{Fc})(COD)]_2$, 173

Preparation and organometallic complexes of the new unsymmetrical ligand: $Ph_2PNHC_6H_4PPh_2$, 83
Synthesis, characterization and X-ray structural, electrochemical and Mössbauer study of mercury(II) complexes with 1′-(diphenylphosphino)ferrocenecarboxylic acid, 319
The first beryllium diorganoarsenide: synthesis and structure of $(\eta^5\text{-}C_5Me_5)BeAs(t\text{-}Bu)_2$, 66
Zirconium
Geometry and electronic structure of bis(tetrahydridoborato)bis(cyclopentadienyl)zirconium(IV), 267
Immobilization of zirconium amide on a Cp-modified silica surface and its use as a catalyst for ethylene polymerization, 273
Synthese und Polymerisationseigenschaften substituierter *ansa*-Bis(fluorenyliden)komplexe des Zirconiums, 328
The first early transition metal perfluorovinyl complexes: the synthesis of $Cp_2M(CF{=}CF_2)_nX_{2-n}$ (Cp: $\eta^5\text{-}C_5H_5^-$; M = Ti, Zr; X = Cl or F) and structures of $Cp_2Ti(CF{=}CF_2)_nX_{2-n}$ (X = Cl, F) via Ti K-edge EXAFS studies, 301
Zwitterionic cluster complex
Meta and *para* metallation of EPh_4^+ (E = P, As) and $N(PPh_3)_2^+$ by the dinuclear acylanion $[Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7ax\text{-}(C(Ph)O)]^-$. Formation of zwitterionic cluster complexes $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4EPh_3)$ (E = P, As; $x = m$, p) and $Re_2(\mu\text{-}H)(\mu\text{-}PCy_2)(CO)_7(x\text{-}C_6H_4PPh_2NPPh_3)$, 345